

Standards Recommendation

Summary:

Recommendation: The OFR should focus its immediate efforts to standardize the types and formats of data reported and collected on behalf of the Financial Stability Oversight Council (FSOC) on the content standards for reporting OTC derivative contracts to swap data repositories (SDRs).

Rationale: The Dodd Frank Act (DFA) specifically requires the Commodity Futures Trading Commission (CFTC) and the Securities & Exchange Commission (SEC) to develop and enforce rules for reporting of OTC derivative contracts to SDRs to facilitate monitoring of market functions and to support systemic risk assessment. There is no current standard for defining the meaning of the data that swap dealers are required to report to SDRs. This lack of standards inhibits the CFTC and SEC from validating and normalizing data across SDRs and across geography, standardizing product identification, consistently aggregating and classifying instruments, aligning reports using various messaging schemas and supporting complex analytics based on ad-hoc scenarios. The pathway to addressing this challenge is aligned with the DTS financial instrument database recommendation and it makes sense to start the process of developing the financial instrument database in conjunction with the immediate requirements of the CFTC and SEC for reporting OTC derivative contracts to SDRs.

Background:

The Office of Financial Research (OFR) is directed to implement regulations to standardize the types and formats of data reported and collected on behalf of the Financial Stability Oversight Council (FSOC). The Legal Entity Identifier (LEI) standard was a clear illustration of how the data standardization objective can be implemented and extended. One of the objectives of the Data & Technology Subcommittee (DTS) is to work with the OFR to establish an operational route map on the other core standards needed to support the FSOC and member agencies.

DTS has created a Standardization Working Group to assess the analytical objectives of FSOC (in cooperation with the Risk and Research Subcommittees of FRAC) and translate them into specific standards priorities. The range of standards needed to meet these objectives is broad ranging from standards for loans and loan portfolios to classification to multi-listed instrument identification to derivatives transparency reporting. DTS views the full spectrum of standards as important factors of input for OFR to consider, but concludes that the most immediate problem should be to work with the Commodities and Futures Trading Commission (CFTC) and the Securities & Exchange Commission (SEC) to develop standards for reporting OTC derivative contracts to swap data repositories (SDRs).

The Dodd-Frank Wall Street and Consumer Protection Act (DFA) specifically requires the CFTC and the SEC to develop and enforce rules for reporting of these derivative transactions to SDRs to facilitate monitoring of market functions and to support systemic risk assessment. The CFTC and SEC have the authority under DFA to mandate detailed standards for what data should be reported as well as the format and meaning of the data, but they have not yet specified these standards. This lack of standards (both content and format) inhibits the CFTC and SEC from performing their market oversight and systemic risk analysis objectives. In particular, the lack of standards makes accurate aggregation and complex analytics very difficult because the critical contractual terms are not reported based on a common set of concepts and definitions.

The pathway to addressing this challenge is very much in alignment with the DTS recommendation on the OFR's obligation to publish a financial instrument database. In this areas of objectives the SEC, CFTC and OFR are closely aligned. The CFTC and SEC need to

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develop detailed standards for reporting on a specific set of contracts. The OFR needs to develop the concepts, definitions and business relationships (i.e. the contractual ontology) associated with all financial instrument types.

DTS believes that it makes sense for OFR to start the process of developing its financial instrument database by working with the CFTC and SEC to develop the ontology for reporting OTC derivative contracts to SDRs. It is worth noting that this is very similar to the approach that led to the LEI initiative.

Financial Company Database and Financial Instrument Database Recommendations

Summary:

Financial Company Database Recommendation: The OFR should adopt the Global Legal Entity Identification System (GLEIS) as the basis for meeting its requirement under the Dodd Frank Act (DFA) to prepare and publish a financial company reference database, subject to the judgment that the GLEIS is on track to be operational in a timely manner, and that an effective governance structure is put in place and ensure that adequate standards for initial and ongoing data verification are met.

Rationale: The lack of a single, comprehensive system for uniquely identifying the specific parties to financial contracts has been an obstacle to both the management counterparty risk within individual financial firms and assessing how “shocks” are likely to be propagated through the financial system. The authors of DFA gave OFR a specific mandate to prepare and publish a financial company reference database in part to address these problems. The GLEIS, which is being developed under the guidance of the Financial Stability Board, has the potential to be met this need. The OFR should use the GLEIS as the foundation for meeting its DFA mandate in this area, assuming that the GLEIS is being developed in a timely manner, and that adequate quality controls are assured.

Financial Instrument Database Recommendation: The OFR should meet its obligation under the Dodd Frank Act (DFA) to prepare and publish a financial instrument database by developing (in cooperation with market initiatives) a comprehensive ontology capable of precisely capturing the contractual terms of all financial instrument types, cross-referenced to both messaging taxonomy and extraction symbology.

Rationale: There is no standard for the terms, definitions and business relationships that define the legal terms and conditions, descriptions, restrictions, triggers, capital structures, ratings, obligations and cash flow characteristics about the various types of financial instruments that exist with unambiguous precision. This lack of precision inhibits the ability of market authorities to classify, analyze, model and unravel essential links between instruments and their

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structure. The function of the ontology is as the “Rosetta Stone” or reference point for mapping from data repositories to a common business data standard to define what each financial instrument is and to ensure a precise understanding of how it works in the real world based on the contractual facts about its construction.

Background:

The Office of Financial Research (OFR) is required under the Dodd-Frank Wall Street and Consumer Protection Act to prepare and publish a financial company reference database as well as a financial instrument reference database. These two reference databases were baseline components behind the creation of the OFR because they represented two of the most essential (and missing) building blocks to enable both transparency and financial stability analysis.

The company database is needed to help regulators and market authorities uniquely identify legal entities as well as understand the structure of company ownership, the meaning of control and the nature of legal obligations as they work to understand the way risk flows through complex entity relationships. The financial instrument database is needed to ensure a precise understanding of the terms, conditions, descriptions, structures and cash flow characteristics of each type of financial instrument that exists now and in the future. The function of the instrument database is to define with unambiguous precision what each financial instrument is and how it works in the real world based on the contractual facts about its construction and without relying on proprietary and non-standard naming conventions.

Financial Company Database:

Regulators and market authorities recognize the importance of ensuring that each legal entity is uniquely and precisely identified. It is this recognition that gave rise to the OFR’s Statement on Legal Identification on Financial Contracts, issued in November 2010 and the Global Legal Entity Identification System (GLEIS) initially coordinated under the direction of the Financial Stability Board and now moving forward under the Regulatory Oversight Committee (ROC). It is the opinion of the Data & Technology Subcommittee (DTS) that the GLEIS, if implemented on a timeframe meeting the OFR and FSOC systemic risk obligations, with effective governance necessary to ensure that it meets quality standards of both initial and ongoing data verification,

fulfills OFR's legislative obligation for preparing and publishing a financial company database. ***DTS proposes offering this as a formal recommendation by the Financial Research Advisory Committee (FRAC) at the August 1 meeting of the Committee.***

DTS will further recommend that OFR create a work program to define and verify, with both financial institutions and US regulatory authorities, the criteria for quality assurance necessary to establish confidence in the data produced by the GLEIS. The outcome of this quality criteria research is designed to be used as a core artifact to help U.S. agencies, authorities and financial institutions in global negotiations about both the governance mechanisms and the core operational functions for the GLEIS and to ensure that all relevant U.S. stakeholders will be able to rely upon the GLEIS for financial stability analysis.

DTS has formed a "Company Database Working Group" to help OFR define the roles, processes and procedures necessary to oversee data quality as well as the functional responsibilities of the various participants (i.e. the central operating unit, the local registration units, the company registrants, financial counterparties, validation agents) in the data quality and maintenance process.

The unique identification of the legal entities is the basic building block required for the risk assessment that the regulators seek. The Working Group will also perform research and make recommendations to the OFR on the inclusion of entity hierarchies and on the use of "legal form documentation" as the mechanism for reporting about ownership structures, controlling relationships and obligations based on the role of the legal entity in the financial process. These components are key extensions to the basic entity identification requirement so the regulators can clearly understand the relationship of entities and the flow of risk.

Financial Instrument Database:

The financial industry suffers from a reference and market data language problem in that there is no universally accepted set of concepts, definitions and nomenclature against which financial reporting is aligned. This is a serious problem that inhibits the ability of market authorities and financial institutions to accurately classify and aggregate financial exposures, to perform

consistent analysis, to run complex models based on variable scenarios, to create the essential links between instruments and their structure, to analyze the obligations of the various players and to understand the complex lattice of relationships that exist across the diverse financial industry.

This language problem exists because data originates from dozens of sources (i.e. vendors, issuers and via corporate actions) who generally use their own concepts, definitions and nomenclature to describe specific data attributes; is stored in hundreds of unconnected repositories where attributes are often renamed to fit the constraints of legacy environments; is regularly integrated into existing applications where data is transformed for processing; and is often managed on an independent (rather than linked) basis to support discrete business objectives. As a result we have data concepts that use different words to mean the same thing, use the same words to mean different things and use vague terms that don't capture critical nuances.

The financial industry has been managing this problem by relying on reconciliation activities and manual transformation processes to tactically repair data as problems emerge. This reconciliation approach is inefficient, but could be tolerated when managing data on a vertical basis (i.e. within the context of a specific business process). Reconciliation is no longer an option for managing data horizontally across multiple linked business units or across the spectrum of the interconnected global financial industry.

The problem of non-standard and inconsistent nomenclature, standards and definitions is clear when examined in the context of OTC derivatives. Without a shared understanding about the “things” in the

financial industry, the “facts” about these things and how the “relationships” among these things are structured - regulators are being challenged to consistently understand how these bespoke contracts actually work, how to standardize product identification, how to classify these derivatives so that they can be aggregated and linked, how to align the data with various messaging standards, how to validate data quality and how to normalize data across swap

repositories. This problem is even more apparent when viewed in the context of risk data aggregation where the goal is to understand obligations, link them to contractual requirements, examine them based on an understanding of role performed and evaluate the implications based on various economic scenarios across the industry.

It is the opinion of the DTS that the legislative obligation of the OFR to prepare and publish a financial instrument database should be met by developing (in cooperation with market initiatives in this area) a comprehensive ontology, with associated concepts, definitions and business relationships, capable of precisely capturing the contractual terms of all financial instrument types, cross referenced to both messaging taxonomy and extraction symbology (i.e. the Rosetta stone for financial contracts).

It is our further opinion that the OFR should not seek to build a database that includes the reference data details and data values of every individual financial contract. The collection of such reference data is the domain of financial data vendors and is not something that needs to be done through a public sector utility. Collecting and publishing reference data is not the problem. The big problem is about alignment of data meaning across the industry. This is the missing dimension. It is the key to consistent aggregation, the baseline for systems integration and the building block of straight through processing. ***DTS proposes offering this as a formal recommendation by FRAC at the August 1 meeting.***

DTS has created an “Instrument Database Working Group” to further refine the recommendation and to define an operating model for implementation of this common language objective. The working group will support OFR in creating the justification on why a database containing precise contractual descriptions of every contract type is needed and how it will support the analytical goals of FSOC member agencies. The working group will advise OFR on the viability of implementation, how data vendors and firms will use it for cross-referencing, how the instrument database will relate to other standards (i.e. FpML, FIX, ISO 20022, MISMO and XBRL), the process for registration of instrument types and technical issues related to both development and public access to the database. DTS is contemplating a practical demonstration of the value of the instrument database as applied to derivatives for unique product identification,

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data validation, classification for aggregation, reporting alignment and in support of complex analytics.